



Daily Drilling and Scientific Report for IODP Expedition 313 New Jersey Shallow Shelf

3rd June 2009 (0000-2400, local time)

1. Location

Hole MAT-2D (Hole M0028A).

Time zone: US Eastern Time, UTC -4

Position at midnight:

Latitude: 39° 33.94279' N

Longitude: 73° 29.83481' W

2. Activity summary

Coring of MAT-2D (M0028A)

3. Science report

After a 2-day effort to return to the depth at which the bit had been lost on May31, Core 45R (328-331 mbsf) was recovered from several meters above the anticipated depth of the bit assembly, and arrived on deck at 0230 hrs. By core 49R (339-342 mbsf) we had passed the previously drilled depth with no indication of the bit. Furthermore, cores 45R-49R were the expected lithologies (glauconitic quartz sandstone) showing no evidence of caved-in material as might have been found if we had followed the existing hole down to the old bit. This suggested we were actually in a 'new' hole, and in reviewing driller's records it now appears the drill string diverted from the original hole at 282 mbsf. Relieved by this good fortune and the good recovery we were having, drilling continued for the rest of the day, ending with core 54R at 357-360 mbsf, still in glauconitic quartz sandstone, very close to the major m5.3 sequence boundary of early Miocene age.

4. Core recovery details

Hole	M0028A
Cores recovered	10
Drilled length	29.37 m
Recovered length	21.15 m
Recovery	72.01 %
Depth at midnight	363.37 mbsf

5. Weather

Sea swell 1 - 3 ft; variable direction swinging from W to E throughout the day; wind speed 10 - 20 kt gusting to 29 kt overnight; dry and sunny until mid afternoon when it became overcast with showers occurring from early evening; 21°C.

Next 24 hrs: Sea swell 3 - 4 ft; NE winds around 10 - 15 kt gusting up to 20 kt; chance of rain early morning and again in the afternoon; 18°C.